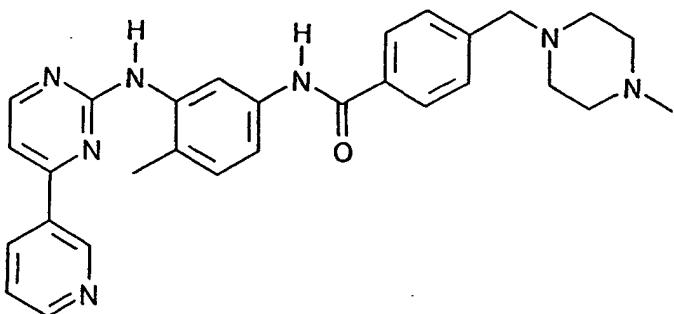


CLAIMS:

1. Use of 4-(4-methylpiperazin-1-ylmethyl)-N-[4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylamino]phenyl]-benzamide of formula



or a pharmaceutically acceptable salt thereof for the manufacture of a medicament for the treatment of a mutated-RET kinase associated disease.

2. The use of 4-(4-methylpiperazin-1-ylmethyl)-N-[4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylamino]phenyl]-benzamide or a pharmaceutically acceptable salt thereof in the treatment of a mutated-RET kinase associated disease.

3. The use according to claim 1 or 2 wherein the mutated-RET kinase associated diseases comprises thyroid cancers, pheochromocytoma, mucosal neuromas, hyperparathyroidism, parathyroid hyperplasia, Hirschsprungs disease or Cutaneous Lichen amyloidosis.

4. The use according to any one of claims 1 to 3 wherein the thyroid cancer is selected from medullary thyroid carcinomas and papillary thyroid carcinomas.

5. The use according to claim 4 wherein the medullary thyroid carcinomas are the hereditary multiple endocrine neoplasias type 2.

6. The use according to claim 5 wherein the hereditary multiple endocrine neoplasias type 2 are MEN2A, MEN2B or FMTC.

7. A method of treating warm-blooded animals including humans suffering from a mutated-RET kinase associated disease which comprises administering to a said warm-blooded animal

in need of such a treatment a dose, effective against said disease, of 4-(4-methylpiperazin-1-ylmethyl)-N-[4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylamino]phenyl]-benzamide or a pharmaceutically acceptable salt thereof.

8. A method according to claim 7 wherein a daily dose of 10 to 1000 mg of 4-(4-methylpiperazin-1-ylmethyl)-N-[4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylamino]phenyl]-benzamide of formula I is administered to an adult.

9. A method according to claim 8 wherein the monomethanesulfonate salt of 4-(4-methylpiperazin-1-ylmethyl)-N-[4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylamino]phenyl]-benzamide is administered.

10. Use or method according to any of the preceding claims wherein 4-(4-methylpiperazin-1-ylmethyl)-N-[4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylamino]phenyl]-benzamide is in mesylate salt form and in the beta crystal form thereof.